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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,287	07/09/2003	Hiroyuki Takahashi	16816	9906

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EXAMINER	
JOHNSON III, HENRY M	

ART UNIT	PAPER NUMBER
3739	

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/616,287	TAKAHASHI, HIROYUKI
	Examiner	Art Unit
	Henry M Johnson, III	3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *070903, 121503*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to because in figures 2-5, the reply unit is improperly labeled "replay unit". Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "the originating medical device" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Specification

The abstract of the disclosure is objected to because it exceeds 150 words and is not written in concise, easily understood terms. Correction is required. See MPEP § 608.01(b).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Integrated Surgical system with Multiple Devices.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

"Driving control" is more commonly stated as drive control. The terms double and triple switch are used improperly. It appears the intent is second and third respectively.

On page 8, lines 11-13, the phrase " supplies high-frequency electric current for an electric scalpel to treatment equipment" is unclear as the scalpel is the treatment device.

On page 8, line 22, the term " instructing driving" is awkward in its wording.

On page 10, line 24 the term "crushing/suction" is not proper.

The translation has resulted in awkward and cumbersome wording that is not clear, concise and exact, making the disclosure difficult to comprehend.

Claim Rejections - 35 USC § 102

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,788,688 to Bauer et al. Bauer et al. disclose a surgical apparatus that integrates multiple surgical devices (abstract) using a computer system (Fig. 3, # 78) with standard

interfaces for communication with the devices (IEEE-488 or RS-485). The interface enables the system with both the communication means and the drive control transmission means. The processor of the computer system enables a means for complex decision making based on the information received from the devices, including the surgeon's control panel (Fig. 3, # 70), and sending any information or control signals to the devices. This decision capability is specifically disclosed by an example not allowing the monopolar and bipolar devices to operate simultaneously (Col. 16, lines 1-6). Laparoscopic devices disclosed include insufflation devices (pneumoperitoneum), irrigation/suction, laser (Col. 1, lines 26-30) and monopolar and bipolar electrosurgical devices (Col. 6, lines 49-53).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,788,688 to Bauer et al. in view of U.S. Patent 5,502,726 to Fischer. Bauer et al. are discussed above, but do not disclose timeouts. The use of timeout circuits and watchdog timers is pervasive in the art as evidenced by the Fischer patent that teaches a medical network that uses a watchdog timer (Fig. 5, # 526) to check for timeliness of data transfers and to initiate a program sequence in the event of a timeout. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the timeout circuits as taught by Fischer in the system of Bauer et al. to insure system integrity.

Regarding claim 4, Bauer et al. teach activation of the devices by hand or foot switches (Fig. 8) and that status information communicated to the processor.

Claims 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,788,688 to Bauer et al. in view of U.S. Patent 6,679,875 to Honda et al. Bauer et al. are discussed above, but do not disclose an ultrasonic device or the explicit teaching of the use of an identifying code for each device. Honda et al. disclose a medical treatment system including an ultrasonic device (Col. 5, line 6) and a HF cutting device (Col. 5, line 10) and the use identifying codes for each device (Col. 2, lines 51-54). The decision means and switch detecting means are also discussed in Bauer et al. above.

Regarding claims 6, 7 and 9, although it is strongly implied by Bauer et al. that an identifying means is included (Col. 11, lines 1-15), it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the identifying codes as taught by Honda et al. in the invention of Bauer et al. to insure a positive knowledge of each device in the system.

Regarding claim 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the ultrasonic and HF devices as taught by Honda et al. in the device of Bauer et al. as they are routinely used in both endoscopic and laparoscopic procedures.

Regarding claims 10-12, the surgical devices disclosed are known in the art and all require ancillary or support devices to function properly. The presence of a drive device is implicitly disclosed when a device is disclosed. With the pervasive use of computers in the medical arts, most devices are provided with communications capability to standard computer interfaces such as IEEE-488 or RS-485. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include computer compatible device drivers in either or both of the inventions of Honda et al. or Bauer et al.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,646,541 to Wang et al. teach a computer control system for a plurality of medical devices with drivers for each device (Fig. 4, # 52).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M Johnson, III whose telephone number is (703) 305-0910. The examiner can normally be reached on Monday through Friday from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Henry M. Johnson, III
Patent Examiner
Art Unit 3739